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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,215	02/23/2000	Wataru Matsutani	040894-5147-01	4388

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EXAMINER

WILLIAMS, JOSEPH L

ART UNIT PAPER NUMBER

2879

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/513,215	Applicant(s) MATSUTANI ET AL.	
	Examiner Joseph L. Williams	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 4-25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-41 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/23/200, 7/25/2000</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS 8/22/2001</u> . |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 1-3 and 26-44 in the reply filed on 04 November 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Please note that amended claims 4-25, if rejoined, would be treated as product by process claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation would not be afforded patentable weight (see MPEP 2113).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 42-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Osamura et al. (US 6,094,000).

Regarding claim 1, Osamura ('000) teaches in figure 2 and the abstract a spark plug (no number) comprising: a central electrode (3); an insulator (2) provided exterior to the central electrode, a main metallic shell (1) provided exterior to the insulator, a ground electrode (4) having one end coupled to the main metallic shell and another end facing the central electrode, and an igniting portion (5, 6) secured to at least one of the central electrode and the ground electrode, and forming a spark discharge gap; wherein the igniting portion includes an Ir-based alloy including Rh in an amount ranging from over 10% to less than 30% wt. (read 1 wt% to 60 wt%)

Regarding claim 2, Osamura ('000) teaches the Ir-based alloy includes Rh in an amount ranging from 15 to 25 wt%.

Regarding claim 3, Osamura ('000) teaches the Ir-based alloy includes Rh in an amount ranging from 18 to 22 wt%.

Regarding claim 42, Osamura ('000) teaches in figure 2 and the abstract a spark plug (no number) comprising a central electrode (3); an insulator (2) provided exterior to the central electrode; a main metallic shell (1) provided exterior to the insulator; a ground electrode (4) coupled to one end of the main metallic shell and having another end facing the central electrode; and an igniting portion (5, 6) secured to at least one of

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the central electrode and the ground electrode, and forming a spark discharge gap;
wherein the igniting portion includes an Ir-based alloy including Rh in an amount ranging from over 10% to less than 30% wt%. (read 1 wt% to 60 wt %)

Regarding claim 43, Osamura ('000) teaches the Ir-based alloy includes Rh in an amount ranging from 15 to 25 wt%.

Regarding claim 44, Osamura ('000) teaches the Ir-based alloy includes Rh in a amount ranging from 18 to 22 wt%.

Allowable Subject Matter

3. Claims 26-41 are allowed.

The following is an examiner's statement of reasons for allowance: Regarding independent claim 26, the prior art of record neither shows nor suggest a spark plug comprised of, in part, wherein a chip including an Ir-based alloy including Rh in an amount ranging from 7 wt% to 10 wt% is placed on a tip end face of the central electrode comprising Ni alloy; and an annular welding portion laid across the chip and the central electrode is formed so as to form the igniting portion including an Ir-based alloy including Rh in an amount ranging from 7wt% to 10 wt%.

Regarding independent claim 27, the prior art of record neither shows nor suggest a spark plug comprised of, in part, wherein a chip including an Ir-based alloy including Rh in an amount ranging from 10 wt% to 25 wt% is placed on a tip end face of the central electrode comprising Ni alloy; and an annular welding portion laid across the

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chip and the central electrode is formed so as to form the igniting portion including an Ir-based alloy including Rh in an amount ranging from 10 wt% to 25 wt%.

Due to their dependency, claims 28-41 are necessarily allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph L. Williams
Primary Examiner
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